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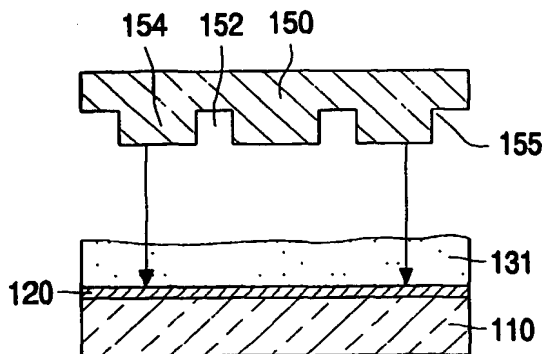
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ning of each regular issue of the PCT Gazette.

(54) Title: FIELD EMISSION DEVICE, AND METHOD OF MANUFACTURING SUCH A DEVICE



(57) Abstract: A field emission device (100) is provided with  
a cathode electrode (120) and a gate electrode (140). Between  
these electrodes, a patterned dielectric layer (130) is provided.  
According to the invention, this dielectric layer (130) is manufac-  
tured from a liquid precursor material (131) which is patterned by  
means of a liquid embossing step, i.e. engaging a patterned stamp  
(150) with the liquid material (131). After removing the stamp  
(150), the liquid material is cured to form the patterned dielectric  
layer (130). Preferably, in a subsequent manufacturing step, the  
cathode electrode (120) or the gate electrode (140) is formed over  
the patterned dielectric layer (130) in a self-aligned way.

WO 2004/055852 A3

# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/185949 A1 (YANIV ZVI ET AL) 12 December 2002 (2002-12-12)	1-6, 9
X	figures 2, 4 and 5; paragraphs '0001!, '0012! - '0016!, '0018!	7, 8, 10-12
Y	WO 01/20402 A (MASSACHUSETTS INST TECHNOLOGY) 22 March 2001 (2001-03-22) page 2, line 9 - page 3, line 10; page 4, lines 2-11; page 8, line 11 - page 12, line 12; page 24, line 23 - page 26, line 8; figures 3, 10	1-6

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- \*G\* document member of the same patent family

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	BULTHAUP C A ET AL: "ALL-ADDITIVE FABRICATION OF INORGANIC LOGIC ELEMENTS BY LIQUID EMBOSSING" APPLIED PHYSICS LETTERS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 79, no. 10, 3 September 2001 (2001-09-03), pages 1525-1527, XP001083261 ISSN: 0003-6951 page 1525, column 1 - page 1526, column 1; page 1527, column 2; figure 1 -----	1-6
Y	LEPPAVUORI S ET AL: "A NOVEL THICK-FILM TECHNIQUE, GRAVURE OFFSET PRINTING, FOR THE REALIZATION OF FINE-LINE SENSOR STRUCTURES" SENSORS AND ACTUATORS A, ELSEVIER SEQUOIA S.A., LAUSANNE, CH, vol. A42, no. 1/3, 15 April 1994 (1994-04-15), pages 593-596, XP000449988 ISSN: 0924-4247 page 593, column 2, paragraph 2 - page 595, column 1, paragraph 1; figure 1 -----	6
Y	US 5 448 132 A (KOMATSU HIROSHI) 5 September 1995 (1995-09-05) column 2, line 20 - line 33; figure 2B -----	9
A	WO 02/093258 A (ELMICRON AG ; SCHMIDT WALTER (CH); STEIERT PHILIPPE (CH)) 21 November 2002 (2002-11-21) page 12, line 9 - page 13, line 13; figures 7,8 -----	9

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